Bob Dudney, M.D.

20 December 2016

FCC Comment on Proceeding 16-399

Copper telecommunications lines have numerous advantages, including higher bandwidth than many if not most wireless methods.

Not least is greater reliability, as during power outages when wired telephone lines are the most likely communication service to remain functional.

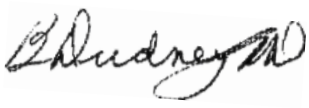
Storm damage is also usually more isolated with wired networks, whereas damage disrupting a centralized wireless transmission site halts services to numerous customers, and requires far more time and effort to restore if damaged extensively, as by lightning or high winds, tornadic at the extreme.

While fiber-optic networks have speed advantages, they require a powered receiver, hence a copper line with power provided by the exchange is superior during power outages, especially when contacting emergency services is essential to survival.

Furthermore, ever-growing observations of biological harm from electromagnetic radiation, in both rigorous laboratory settings and via epidemiology, demand far more caution in exposing especially human beings, as well as all other organisms, than presently exercised commonly.

Copper telephone networks are also least susceptible to disruption or interference by criminals, *e.g*, cyberattacks.

Given the virtually universal installed base of copper networks plus the unknown timelines and costs, not least in radiative harms to health and longevity, plus huge if not vast uncertainties whether wireless services would ever fully replace the present lifelines, it is at best premature to consider discontinuing copper services anywhere, if not diabolical.



Box 810 Guerneville CA 95446